

# PREPARING A GROUNDWATER PROTECTION PLAN

Revised April 2004

This guidance document is based on 401 KAR 5:037, Section 3(3) (a) through (g).

The activities that require the development and implementation of a Groundwater Protection Plan (GPP) are listed in Section 2, pages 4-6, of the regulation. Read this section thoroughly and note any of the listed activities that are or will be conducted at your site. You will want to read Section 2(3) and 2(4) to determine whether any of your activities may be excluded from the GPP requirement.

All the activities conducted at your site that require a GPP must be included in one GPP. Cabinet-written generic groundwater protection plans are available from the Groundwater Branch or may be downloaded from the Groundwater Branch web site for the following activities:

1. On-site residential septic system
2. Domestic water well
3. Monitoring well
4. Water well driller
5. Home heating oil

Go to <http://water.ky.gov/gw/gwprotection/gwplans>. Click on Generic GPPs in the left-hand side bar. Fact sheets and mini-guidances are also listed in the left-hand side bar. The regulation and guidance may be accessed by clicking on the underlined words in the information on the right-hand side. If your facility operates an onsite septic system, water well, or monitoring well, you must include them in your GPP. To adapt the practices in the generic GPP to your particular GPP, contact Pat Keefe, Permit Review Section, 502/564-6120 for instructions.

## SITE SPECIFIC VS GENERIC GPPS

The Groundwater Branch STRONGLY ADVISES that site specific GPPs be developed, even when there are numerous facilities operating under one corporate name.

### Site Specific GPPs

- are tailored to the site for which they are developed.
- are not required to be submitted to the Groundwater Branch for review, unless called in by a DEP inspector or the Groundwater Branch, or as a requirement in an Agreed Order.

### Generic GPPs

- must be approved by the NREPC Cabinet prior to start up of the activity.
- must be public noticed in two publications of widespread distribution.
- must undergo a 30 day public comment period following public notification.

## USING THE GUIDANCE

### **Follow the Guidance Format.**

Follow the format provided in the guidance to develop your GPP. Using this format will assure that most, if not all, of the information the Groundwater Branch deems necessary for adequate review is included. It also organizes the information so that any member of the general public who asks to read your plan can follow it without needing additional explanation.

### **Use all Headings and Subheadings as stated in the Guidance.**

Do not make up your own headings or subheadings. Use the headings and subheadings in the order provided in the guidance. Do not leave out headings.

### **Provide all Information requested in the Guidance, where applicable.**

Be sure that you have provided the information requested. The review process is delayed when necessary information has been omitted.

### **Do not reference SPCC or KPDES Best Management Practices (BMPs) Plans.**

The GPP cannot contain broad referrals to SPCC or KPDES Stormwater BMP Plans. However, the practices in those plans that are protective of groundwater may be used in the GPP. See Section C of this guidance, 2<sup>nd</sup> bullet, page 4.

There are three special conditions that must be met in order to incorporate a program by reference. They are listed in Section C in this guidance.

The GPP must stand alone. The GPP may be a separate section or chapter in other BMP plans, but it must contain all the information required for a GPP. It cannot be included in bits and pieces throughout another BMP plan.

## WHEN YOU HAVE COMPLETED THE GPP.....

When you have completed your plan, review the draft to be sure that the GPP has addressed **all** the activities occurring at your site that are covered by the Groundwater Protection Regulation and that you have provided **all** the information, where applicable, for each section.

### **Implement your GPP!**

To be in compliance with 401 KAR 5:037 the GPP must be implemented **immediately** following development. This applies to **all** GPPs, even when a GPP is submitted to the Groundwater Branch for review. Implementation is not dependent upon Groundwater Branch approval of the plan. If your GPP is in review, continue to implement the practices in the submitted GPP. If changes are required, then the new practices should be implemented.

### **Submitting the GPP**

Submittal of a site specific GPP for review by the Groundwater Branch is optional unless:

1. required as part of an Agreed Order.
2. stated by a DEP inspector as a requirement in a Notice of Violation.
3. called in by letter by the Groundwater Branch.

To submit a GPP for review and approval, send one (1) copy of the GPP to Groundwater Branch, Kentucky Division of Water, 14 Reilly Road, Frankfort KY 40601. You will receive a letter stating that the Groundwater Branch has received your plan.

Your initial GPP submittal and any further drafts **will not** be returned. Be sure you keep a copy of each draft so that required changes can be made. The approved draft will be retained in the Groundwater Branch files. You will receive a letter stating the GPP has been approved.

It is not necessary to include the Groundwater Protection Regulation or this guidance document with the GPP when submitting it to the Groundwater Branch for review.

If you have any questions, please contact the Permit Review Section, Groundwater Branch, Kentucky Division of Water, 502/564-6120 and ask for Brenda Taylor or Pat Keefe.

#### Section A. GENERAL INFORMATION

1. Name and Address of Facility

- a. Facility Name
- b. Facility Address
- c. County
- d. Latitude and longitude in degrees, minutes, and seconds
- e. Mailing Address of Facility, if different from Facility Address

2. Person Developing GPP

- a. Name
- b. Address (business address, not home address unless business operates out of the home).
- c. Telephone Number (business phone, not home phone unless business operates out of the home).

3. Person Responsible for Implementing GPP

- a. Name
- b. Address (business address)
- c. Telephone Number

4. Location of Facility on Topographic Map

Only a United States Geological Survey topographic map will be accepted. Copy the 8 1/2 x 11 inch section of the map that contains the location of your facility. Do not enlarge or reduce the size of the map. If that section does not have the name of the topographic quadrangle, please write it on the map.

Mark your facility location with an X.

If you have internet access, topographic maps can be obtained from Topozone.com. Be sure to use the following: View Scale: 1:50,000; Coordinate Format: D/M/S; Coordinate Datum: WGS84/NAD83. If you have questions about navigating Topozone, or need to know other sources for topographic maps, contact Pat Keefe at (502) 564-6120 for directions.

5. Brief Description of Facility Operation.

Section B. ACTIVITIES THAT HAVE THE POTENTIAL TO POLLUTE GROUNDWATER

- In this section **list** all the activities that are conducted at your facility that require a GPP.
- List actual activities; do not quote the regulation.

**Say:** store diesel fuel in 1,000-gallon underground storage tank.

**Don't say:** "Storing, treating, disposing, or related handling of hazardous waste.....in tanks, drums, or other containers, or in piles."

- Include all activities at your site subject to the regulation, even if protective practices are already being implemented.

For example, if an aboveground storage tank (AST) has secondary containment, it still must be listed as an activity subject to 401 KAR 5:037.

- Give complete details about aboveground and underground tanks, including
  1. Number of each type of tank
  2. Capacity of each tank
  3. Identification of contents of each tank
- Details about practices to protect groundwater should be addressed in the next section. The following is a **sample** listing of activities.
  1. Store diesel fuel in 500-gallon aboveground storage tank (AST).
  2. Operate septic system (constructed wetland or sewage lagoon).
  3. Apply fertilizer and herbicides to maintain golf course.
  4. Store gasoline in 10,000-gallon underground storage tank (UST).

Section C. PRACTICES SELECTED TO PROTECT GROUNDWATER FROM POLLUTION

- For each activity listed in Section B, briefly describe the practice that will be used to protect groundwater. See Section 3(4)(a) through (p) and 5(a) through (e), pages 7-8 of 401 KAR 5:037 for the variety of types of practices that may be used. Note that (p) enables you to use other practices to protect groundwater that are not listed in Section 4.
- Practices given in SPCC or KPDES Best Management Plans may be used in the GPP provided that they are protective of groundwater. If you incorporate practices or information from those plans, you **MUST** state page numbers and sections in those plans in which those practices/information are found.
- The Best Management Practices (BMPs) or practices you select must be described. Simply stating that BMPs will be used is too vague. You must briefly describe the practice and tell how it will protect groundwater.
- Information about secondary containment for ASTs must include the kind of material (metal, concrete, asphalt, compacted clay or dirt) making up the floor and berms (sides) of the containment area.
- If there is no secondary containment for an AST, state so.

- If any of your activities listed in Section B are regulated under another program, you may incorporate by reference the groundwater protection practices you are required to use by that program.
- There are special conditions that must be met to incorporate by reference. Only programs that meet **all 3** of the following conditions may be incorporated by reference. These conditions are :
  1. management and design standards;
  2. mandatory monitoring for groundwater pollution or leak detection methods; and
  3. a specific corrective action plan. (401 KAR 537, Section 3(7)(a) and (b).
- USTs are regulated by the Underground Storage Tanks Program. The practices required by this program are to be incorporated by reference. To do so, follow exactly the format below.
  - a. Cite the UST regulation you're governed by.
  - b. State that this regulation specifically requires the following:
    1. management and design standards;
    2. mandatory monitoring for groundwater pollution or leak detection methods; and
    3. a specific corrective action plan.
  - c. The person responsible for implementing the plan must sign a statement that the facility is in compliance with the regulation cited in a above. Use the certification statement below:

I (typed name) certify that this facility is in compliance with (regulation).

Signature

Date

Use the format shown above for incorporating protective practices of other programs. Be sure to replace the UST regulation with that of the regulation of the program being incorporated by reference.

#### Section D. IMPLEMENTATION SCHEDULE

- The GPP must be implemented immediately. Implementation does NOT depend upon approval of the GPP.

Having a GPP, cabinet-approved or not, on file in an office somewhere does **NOT** keep a facility in compliance with 401 KAR 5:037. The GPP **must be** retained and implemented at the site for which it was developed.

- If all protective practices are already being implemented, state so. If protective equipment or devices (secondary containment structures, new ASTs with double walls and overfill alarms, etc.) must be ordered or built within budget constraints, list what is to be done and prospective date by which the protective practice will be completed.

Section E. EMPLOYEE TRAINING

- You are developing a Groundwater Protection Plan; therefore, training must focus on groundwater protection.
- Training must include educating the employees about the importance of groundwater protection.

Training must include all aspects of the GPP. Briefly describe topics to be covered in training the employees about groundwater protection practices.

- State the frequency of training sessions—initial and refresher sessions. Be specific, such as initially on hire and biannually or annually. “When needed” or “frequently” are too vague.

Section F. INSPECTION SCHEDULE

Inspections are conducted to insure that the practices selected to prevent groundwater pollution are being used and are properly functioning.

- State the frequency of the inspections (daily, monthly, quarterly, etc.) and what is to be inspected.
- Include an Inspection Checklist showing what is to be inspected, date, observations, actions taken, if any. This checklist is documentation that you are implementing the GPP.

Section G. CERTIFICATION STATEMENT

- The person who can make the managerial and/or financial decisions that are required to implement your plan should be the one signing the certification statement.
- Use the following certification statement verbatim.

I (typed name) certify that this Groundwater Protection Plan complies with the requirements of 401 KAR 5:037. I have read the terms of the plan and will implement its provisions.

Signature

Date

Section H. REVIEW LOCATION FOR GROUNDWATER PROTECTION PLAN

Section 4(7) of 401 KAR 5:037 provides for public inspection of Groundwater Protection Plans (See pages 11-12). Should you choose to designate the Groundwater Branch, Division of Water, 14 Reilly Road, Frankfort, or any site other than the facility location for public review, a copy of the recertified GPP must be sent to the Groundwater Branch or other site every three years, or whenever recertification is required by a change in activities being conducted.